

# Effectiveness and Cost-Effectiveness of a Digital Peer Navigation Intervention for Patients after Treatment for Prostate Cancer: A Multi-Site Randomized Controlled Trial

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## INTRODUCTION

- Patients with **prostate cancer** (PC) often lack support and face **barriers to care** when dealing with treatment side effects, impairing quality of life<sup>1,2</sup>.
- Patient navigation** can improve access to care, provide personalized support and improve quality of life<sup>3</sup>.
- We developed **True North Peer Navigation (aka PeerNav)** a **digital peer navigation intervention** led by volunteer PC survivor peer navigators and supported by technology<sup>4</sup>.

## AIMS

- To determine the **effect** of True North Peer Navigation in patients after treatment for PC on **patient activation** (primary outcome), quality of life, needs, and service use.
- To evaluate the **cost-effectiveness** of True North Peer Navigation from the perspective of the healthcare payer.

## METHODS

**Study Design:** Pragmatic Randomized Controlled Trial

**Trial Participants:** Patients with localized or locally advanced PC within 3 months of completing treatment

**Trial Settings:**

- Ontario:** Princess Margaret Cancer Centre, Toronto, CA
- British Columbia:** BC Cancer, Vancouver, CA
- Nova Scotia:** Queen Elizabeth II, Halifax, CA

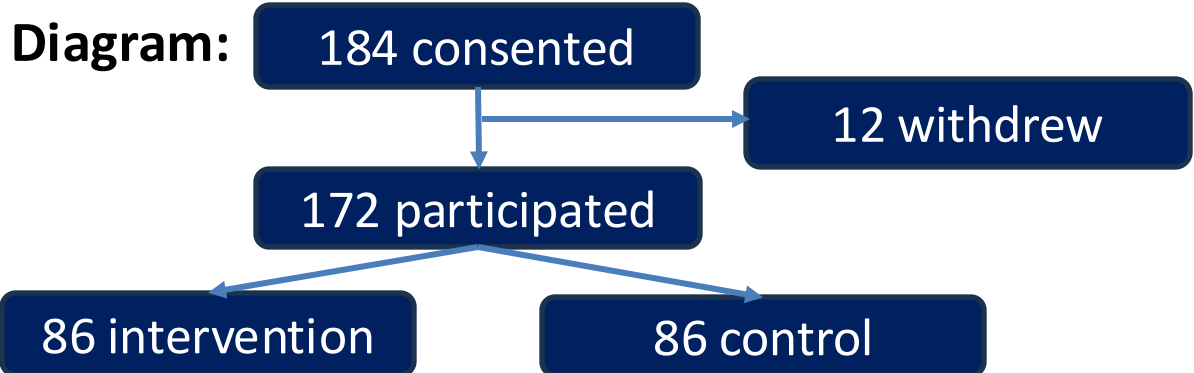
**Trial Arms:**

- Intervention:** True North Peer Navigation
- Control:** In-app Health Resource Library

**Data Analysis:**

Outcomes were compared at baseline and 3-months using mixed-effect general linear models. A Markov model was used to assess cost-effectiveness with 4 states (PAM 1-4) over a 2-year time horizon and 3-month cycle length.

**Consort Diagram:**



## PEER NAVIGATION PROGRAM COMPONENTS

### A. Peer Navigator Training



- Online
- 8-weeks, 36-hrs
- Competency-based
- 8 modules
- Quizzes, cases, role plays

### B. Website and Digital App



- Enrollment
- Matching
- Assessments
- Communication
- Case reporting management
- Resource library

### C. Professional Support



- Clinical Supervisor
- Monthly debriefings
- 1:1 check-ins
- Continuing education

## What do Peer Navigators do?

### 1. Introduction:

- Assess needs and barriers
- Clarify understanding and expectations about roles
- Build relationship

### 2. Support:

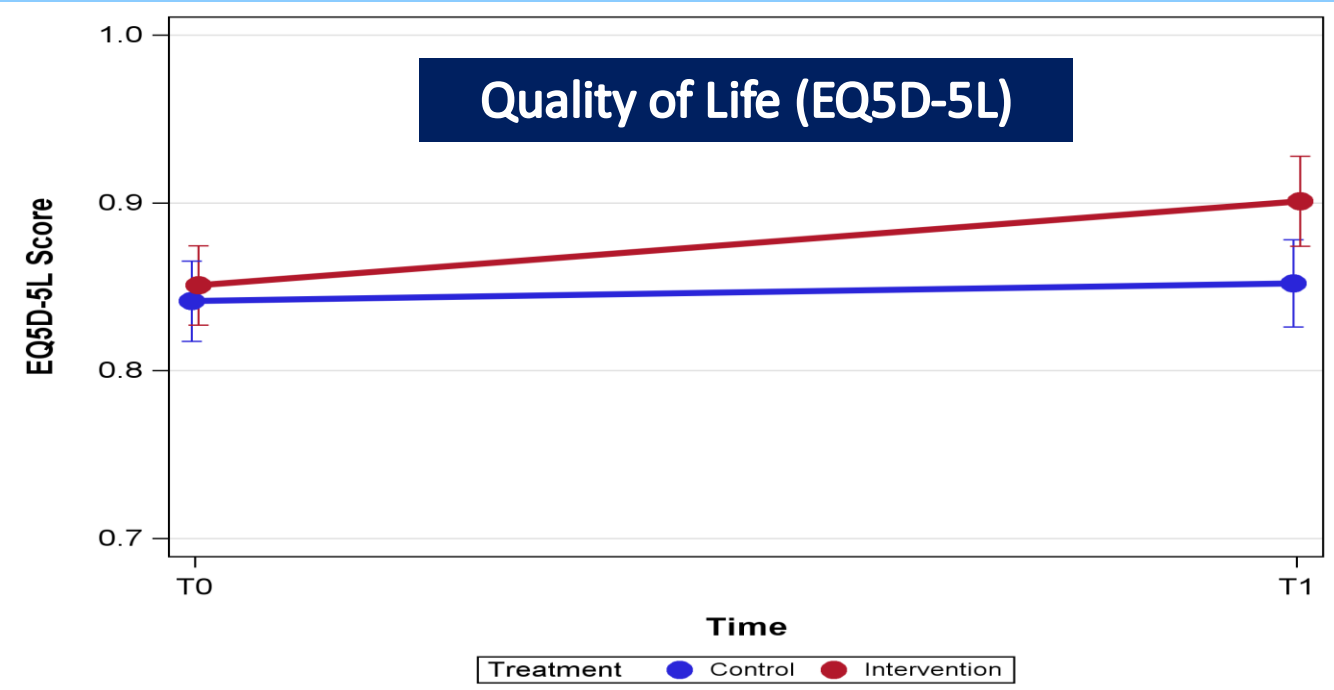
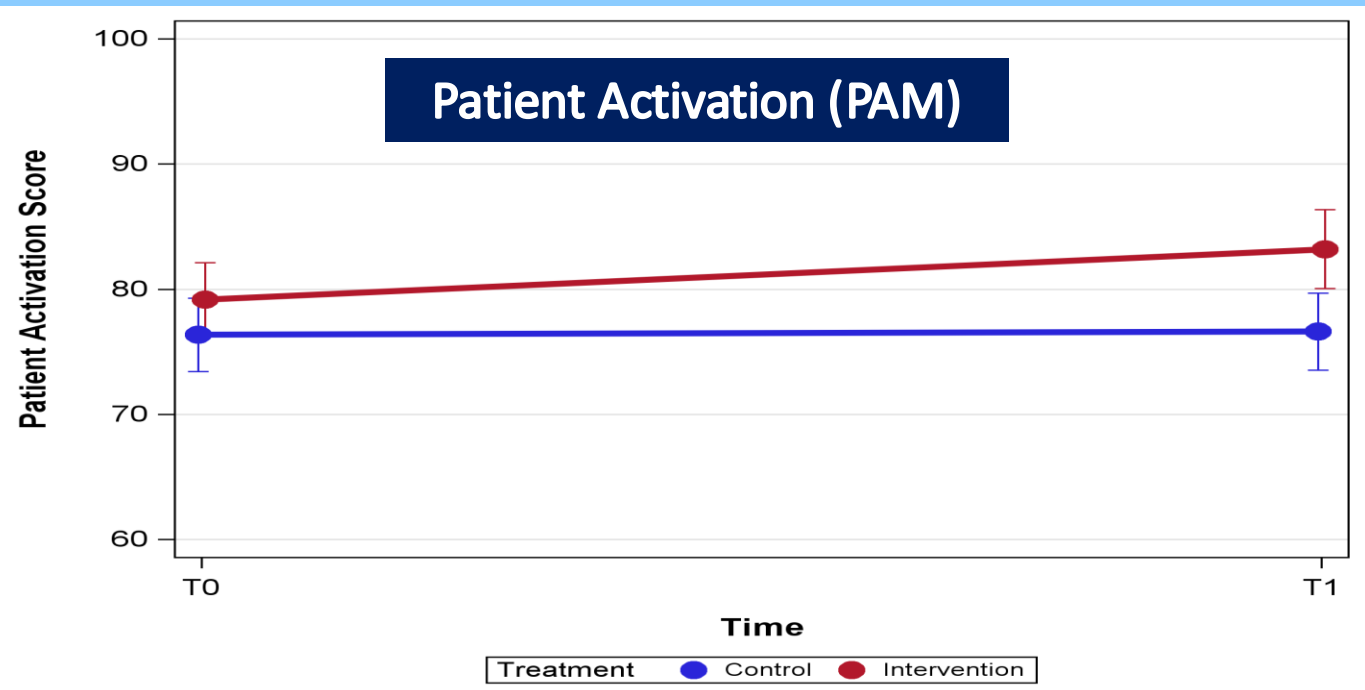
- Offer support
- Share resources
- Assist with addressing needs and barriers

### 3. Closure:

- Offer support as needed
- Encourage looking after one's own health
- Promote empowerment and self-advocacy



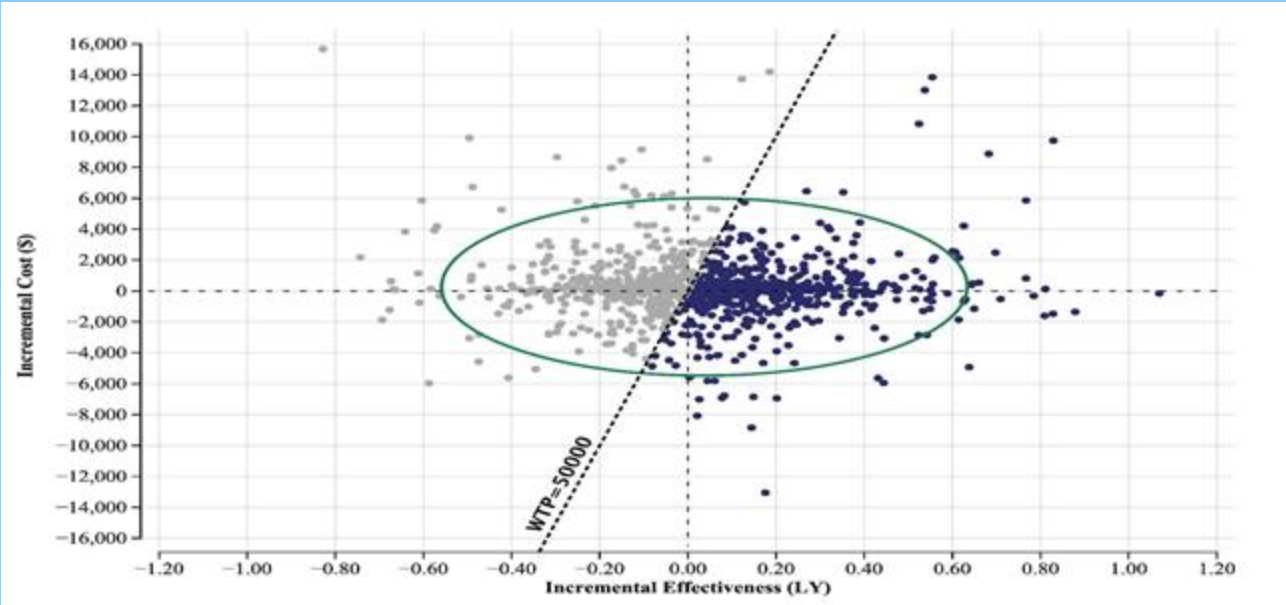
## EFFECTIVENESS RESULTS



## COST-EFFECTIVENESS RESULTS

Condition	Cost (CAD)	QALYs*	ICER** (\$/QALY)
Intervention	4,882	6.69	
Control	4,565	6.65	
Incremental	317	0.034	9,283

\*QALY= quality adjusted life years  
\*\*ICER= incremental cost effectiveness ratio  
\*\*\*WTP= willingness to pay threshold (\$50,000 CAD)



## SUMMARY & CONCLUSIONS

- Patients in the intervention group experienced **clinically significant improvements** in patient activation and quality of life compared to the control group.
- The **intervention yielded more QALYs** compared to the control resulting in a cost-effectiveness ratio of \$9,283CAD well below the willingness to pay threshold of \$50,000.
- A digital peer navigation program is an **effective and cost-effective solution** for patients after treatment for PC.
- Future work will explore **how to implement and sustain** digital peer navigation in routine care.

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